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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,638	11/21/2003	Lee Patrick Garvey	18,083	3444

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KIMBERLY-CLARK WORLDWIDE, INC.  
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EXAMINER
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MUSSER, BARBARA J

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/719,638

Applicant(s)

GARVEY ET AL.

Examiner

Barbara J. Musser

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/27/04, 3/17/05</u> | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-52 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1, 25, 38, and 47, it is unclear what is meant by changing the orientation of the treated surface, as conventionally changing the orientation would mean changing its angle rather than its location within the multi-ply web.

Regarding claims 16, 30, 40, 41, and 51, it is unclear what is meant by dropping a ply as this implies that a ply is stripped from the web permanently and not later rejoined with the remainder of the web as applicant's specification appears to indicate.

Regarding claim 16, it is unclear if this re-oriented web is the same re-oriented web formed as in claim 1 or if it is re-oriented again.

Regarding claim 24, it is unclear if a third ply is required or not as a reorientation of a two ply web which was previously oriented effectively places the plies back in their original location prior to the first reorientation.

Regarding claim 34, it is unclear if the web is formed into a roll or wound on a roll.

Regarding claim 38, it is unclear what is meant by dryer side and felt side as these terms are not defined in the specification. It is unclear if this requires the web to

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be paper as applicant's only description of the dryer side and felt side is in relation to the creping of paper, but paper is not claimed. It is suggested that applicant positively recite the step of creping and the type of material comprising the webs. For the purposes of examination, this is assumed to be a means of identifying which side is which without requiring any specific characteristics for the sides and without requiring any specific processes having been done to the sides.

### ***Claim Objections***

3. Claim 25 is objected to because of the following informalities: in line 4, the word —web—appears to have been omitted after “multi-ply”. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 2, 9, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Angier(U.S. Patent 1,974,594) in view of Fritze et al.(U.S. Patent 4,372,997)

Angier discloses providing at least two plies(5, 7), coating on side of one of them with an adhesive asphalt(15), changing the relationship of the plies relative to each

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other, and winding the coated plies on a roll.(35) While the reference does not disclose unwinding the roll, one in the art would understand that the roll would be unwound eventually so that the web could be used. It is noted that the claims do not require any relationship between the winding and unwinding and the reorientation of the layers of the web.

The reference does not disclose the specifics of how the asphalt is applied to the web, simply showing a roller. Fritze et al. discloses it is known to apply asphalt to webs using a knife coater to insure even thickness of the asphalt.(Col. 4, ll. 37-40) It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the asphalt in Angier using knife coating since it is well-known and conventional in the asphalt arts to apply asphalt using knife coating as taught by Fritze et al.(Col. 4, ll. 37-40) particularly since knife coating would allow even thickness for the asphalt layer.

Regarding claim 2, asphalt is a chemical.

Regarding claim 9, both plies are paper.(Pg. 1, ll. 28-29)

Regarding claim 15, after reorientation the sides of the web facing the interior of the composite faced the exterior.

6. Claims 1, 6, 7, 9, 11, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graff(U.S. Patent 5,840,404) in view of Givens(U.S. Patent 5,143,776).

Graff discloses making toilet paper by embossing at least one web and then joining the embossed web together with other webs on a roll.(Figure 3) The reference does not disclose unwinding the roll and re-orienting the web. The separation of plies in

a roll of toilet paper is extremely well known and is called skinning as taught by Givens(Col. 1, ll. 29-33). In skinning, the topmost ply of paper separates from the other layers and is effectively moved to the bottom of the stack formed from the middle and bottom layers as the toilet paper is pulled from the roll by the user. When the top ply is separated from the stack, after one turn of the roll pulling on the top ply, the middle and bottom plies are on top of the top ply. It would have been obvious to one of ordinary skill in the art at the time the invention was made that when skinning, which is a common problem with toilet paper, occurs, the web is re-oriented as it is unwound from the roll.

Regarding claim 6, one of the plies is embossed.(Figure 3)

Regarding claim 7, Graff discloses attaching the plies together at spaced points prior to winding on the roll.(Figure 2)

Regarding claim 9, the plies are made of the same material.(Col. 2, ll. 26-30)

Regarding claim 11, the plies form toilet paper.(Col. 1, ll. 7)

Regarding claim 25, Graff discloses a three layer web. It is noted that the claim does not require the treatment to occur after formation of the multi-ply web.

7. Claims 2, 3, 26, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graff and Givens as applied to claims 1 and 25 above, and further in view of Klofta et al.(U.S. Patent 6,238,682).

The references cited above do not disclose applying a virucidal compound to the toilet paper. Klofta et al. discloses applying a virucidal compound to toilet paper to prevent the spread of germs.(Abstract; Col. 1, ll. 32-35) It would have been obvious to

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one of ordinary skill in the art at the time the invention was made to apply a virucidal compound to the toilet paper of Graff to prevent the spread of germs(Col. 1, ll. 32-35) and to use any well-known and conventional method of applying compounds to paper such as one of the printing methods claimed since such methods are well-known and conventional in the coating and application arts.

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Graff and Givens as applied to claim 2 above, and further in view of Willer(U.S. Patent 5,123,343).

The references cited above do not disclose printing on one of the plies. Willer discloses it is known to print patterns on toilet paper.(Col. 1, ll. 12-25) It would have been obvious to one of ordinary skill in the art at the time the invention was made to print a pattern on one of the plies of the web using any of the conventional methods of printing since such is well-known and conventional in the toilet paper as shown for example by Willer.(Col. 1, ll. 12-25) Since the pattern is intended to be on the web prior to use, one in the art would understand that this printing occurred prior to the end user removing it from the roll.

9. Claims 5 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graff, Givens, and Klofta et al. as applied to claims 2 and 27 above, and further in view of Willer(U.S. Patent 5,123,343).

The references cited above do not disclose printing on one of the plies. Willer discloses it is known to print patterns on toilet paper.(Col. 1, ll. 12-25) It would have been obvious to one of ordinary skill in the art at the time the invention was made to print a pattern on one of the plies of the web using any of the conventional methods of

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printing since such is well-known and conventional in the toilet paper as shown for example by Willer.(Col. 1, ll. 12-25) Since the pattern is intended to be on the web prior to use, one in the art would understand that this printing occurred prior to the end user removing it from the roll.

Regarding claim 28, a printed pattern is considered to provide a visual cue.

10. Claim 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Graff in view of Givens and Klofta et al.

Graff discloses making toilet paper by embossing at least one web and then joining the embossed web together with other webs on a roll.(Figure 3) Embossing is considered a type of crimping. The reference does not disclose unwinding the roll and re-orienting the web. The separation of plies in a roll of toilet paper is extremely well known and is called skinning as taught by Givens(Col. 1, ll. 29-33). In skinning, the topmost ply of paper separates from the other layers and is effectively moved to the bottom of the stack formed from the middle and bottom layers as the toilet paper is pulled from the roll by the user. When the top ply is separated from the stack, after one turn of the roll pulling on the top ply, the middle and bottom plies are on top of the top ply. It would have been obvious to one of ordinary skill in the art at the time the invention was made that when skinning, which is a common problem with toilet paper, occurs, the web is re-oriented as it is unwound from the roll.

The references cited above do not disclose applying a compound to the toilet paper prior to winding. Klofta et al. discloses applying a virucidal compound to toilet paper to prevent the spread of germs.(Abstract; Col. 1, ll. 32-35) It would have been



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obvious to one of ordinary skill in the art at the time the invention was made to apply a virucidal compound to the toilet paper of Graff to prevent the spread of germs(Col. 1, ll. 32-35) and to use any well-known and conventional method of applying compounds to paper such as one of the printing methods claimed since such methods are well-known and conventional in the coating and application arts.

11. Claims 1, 2, 10, 14, 18, 19, 25, 26, 29, 31-33, 47-50, and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Viberg et al.(U.S. Patent 4,495,016) in view of Shiina.(U.S. Publication 2005/0089656)

Viberg discloses forming multi-ply web, applying a hot-melt adhesive to one side of the web, rolling the web up on a roll, unwinding it, separating one layer from one side of the web and placing it on the other side of the web.(Figures 1 and 2; Col. 4, ll. 50-60) The reference does not disclose how the adhesive is applied to the web. Shiina discloses that reverse roll coating is a well-known and conventional method of applying adhesive to a web.(paragraph [00119]) It would have been obvious to one of ordinary skill in the art at the time the invention was made to perform the roll coating on Angier using reverse roll coating since it is well-known and conventional in the adhesive arts to apply adhesive using reverse roll coating as taught by Shiina.(paragraph [0119])

Regarding claims 2 and 26, an adhesive is a chemical.

Regarding claim 10, the plies are made of different materials.(Col. 3, ll. 46-53)

Regarding claims 14 and 29, a machine is threaded with the reoriented web since the rolls(7,11) clearly show the threading of the web into a device that performs a desired function.(Figure 2)

Regarding claims 18, 32, and 52, one ply is separated from the web, threaded around the periphery of the roll, brought back into contact with the unwound portion, and threaded into a machine.(Figure 2)

Regarding claim 19, since a package which is flat on the ends are formed, the web is effectively folded so that at least a portion of the web lies on top of itself.(Figure 2)

Regarding claim 25, the web of Viberg is composed of at least three layers.(Figure 1)

Regarding claims 31 and 33, since the re-oriented web is the intended product, one in the art would understand that each roll would have the layers of the web re-oriented.

Regarding claim 47, Viberg et al. discloses combining several plies, applying adhesive to one of the outer plies, winding them up, and unwinding them to change the orientation. It does not disclose an unwinding step after the combining wherein the adhesive is applied, and then the roll is re-wound prior to unwinding to change the orientation. However, it is well-known in general in the fabrication arts to perform different steps in different locations wherein the web is unwound in each location, a process performed on the web, and the web is rewound as this is a type of batch processing. It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the web, wind it up, unwind it to apply the adhesive, wind it up again, and then unwind to re-orient the layers since it is well-known in general in the

fabricating arts that a process can be performed in several different steps in different locations.

Regarding claims 48-50, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have all the processes occur in the same facility or in different facilities since this would not effect the web characteristics. Absent unexpected results this is considered obvious.

***Allowable Subject Matter***

12. Claims 12, 13, 20, 21, and 34-37 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

13. The following is a statement of reasons for the indication of allowable subject matter: Regarding claim 12, the prior art of record does not teach or fairly suggest the plies being a nonwoven and a tissue web. Regarding claims 13, 34, the prior art of record does not teach or fairly suggest winding the multi-ply web onto a second roll after changing the relationship of the plies in the web. Regarding claim 20, the prior art of record does not teach or fairly suggest winding the multi-ply web up after reorientation. Regarding claim 21, the prior art of record does not teach or fairly suggest printing on the web after reorientation. Regarding claim 35, the prior art of record does not teach or fairly suggest treating the outside of the reoriented web.

**Conclusion**

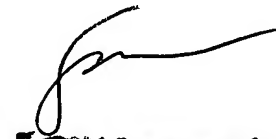
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara J. Musser whose telephone number is (571) 272-1222. The examiner can normally be reached on Monday-Thursday; alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Dunn can be reached on (571)-272-1171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



BJM

  
**CHUAN YAO**  
**EXAMINER**